

REMARKS/ARGUMENTS

Claims 1-27 are pending. By this amendment, claim 4 is amended to correct a typographical error. No new matter is introduced. Reconsideration and prompt allowance of the pending claims is respectfully requested.

35 U.S.C. § 102 Rejections

Claims 22-25 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,588,104 to Lanier et al. (hereafter "Lanier"). Applicants respectfully traverse.

Lanier is directed to a method and apparatus for creating virtual worlds using a data flow network. The method uses a computer display to display the data flow network as a plurality of interconnected units. An interactive program allows the appearance of the plurality of interconnected units to be changed. The data flow network then is automatically altered to correspond with the visual changes. However, Lanier does not disclose or suggest "receiving one or more virtual objects; receiving a video program including one or more virtual object locations, ... comparing the virtual object information and the received virtual objects to select virtual objects for placement in the virtual object locations; and inserting the selected virtual objects into the virtual object locations" as recited in claim 22 (emphasis added). Lanier's method creates virtual worlds so that users may manipulate pictorial objects on a computer screen to effect complicated operations on the virtual world database (see column 1, lines 36-39 of Lanier).

The Examiner asserts on page 2 of the Office Action that Lanier teaches, at column 2, lines 47-63, the steps of receiving one or more virtual objects; receiving a video program including one or more virtual object locations, the video program including virtual object information for placement of virtual objects into the video program; and inserting the selected virtual objects into the virtual object locations. The Examiner further asserts that Lanier teaches, at column 3, lines 32-50, the step of comparing the virtual object information and the received virtual objects to select virtual objects for placement in the virtual object locations. Applicants respectfully disagree.

Lanier describes, at column 2, lines 47-63, a novel apparatus for creating virtual worlds (column 2, lines 37-38) and defining an object in a virtual world (column 2, lines 47-48). Nowhere in the cited language does Lanier disclose or suggest receiving one or more virtual objects. Creating virtual worlds and defining an object is materially different from receiving virtual objects. Receiving an object means taking an object that has already been created. Therefore the step of receiving can only happen after object creation and is entirely different from object creation or definition. Furthermore, Lanier does not teach or suggest

receiving a video program including one or more virtual object locations and inserting virtual objects in the virtual object locations. Column 2, lines 47-63 of Lanier does not mention video program at all, let alone receiving a video program and inserting virtual objects in the video program. In addition, Lanier discloses, at column 3, lines 32-50, a process of facilitating matching a virtual reality's response to the real world (column 3, lines 33-34) and defining modifications to input states in order to speed the processing of input changes (column 3, lines 44-47). The quoted language does not disclose or suggest comparing the virtual object information and the received virtual objects to select virtual objects for placement in the virtual object locations. As noted above, Lanier does not mention video program at all, and certainly does not teach or suggest selecting virtual objects for placement in the video program. Since Lanier does not disclose or suggest all of the elements of claim 22, claim 22 is allowable over Lanier.

Claim 25 is allowable because it depends from allowable claim 22 and for the additional features it recites. For example, Lanier does not disclose or suggest "wherein the inserting step occurs during a display of the video program" as recited in claim 22. The Examiner asserts on page 3 of the Office Action that Lanier teaches this limitation at column 3, lines 32-50. However, as noted above with respect to claim 22, nowhere in the cited language does Lanier disclose or suggest the step of inserting the selected virtual objects into the virtual object locations during a display of the video program. Applicants therefore respectfully request withdrawal of the rejection of claims 22 and 25 under 35 U.S.C. §102 (e).

35 U.S.C. § 103 Rejections

Claims 1-6, 8-14, 15, 17-21, 23, 24, 26, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lanier in view of U.S. Patent 5,588,139 to Lanier et al. (hereafter "Lanier '139"). Applicants respectfully traverse.

To establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) must teach or suggest all of the claim limitations. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) and MPEP § 2142. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and MPEP § 2143.03.

Lanier '139 is directed to a method and system for generating objects for a multi-person virtual world using data flow networks. However, Lanier and Lanier '139, alone or in combination, do not disclose or suggest "receiving one or more virtual objects for use with one or more of the virtual object locations; storing the virtual objects in the viewer's

terminals; and inserting one or more of the received virtual objects into one or more of the virtual object locations during a display or storage of the video program at the viewer's terminal" as recited in claim 1 (emphasis added).

The Examiner asserts on page 3 of the Office Action that Lanier teaches the steps of receiving one or more virtual objects for use with one or more of the virtual object locations and inserting one or more of the received virtual objects into one or more of the virtual object locations during a display or storage of the video program at the viewer's terminal. The Examiner concedes that Lanier does not teach storing the virtual objects in the viewer's terminals. However, the Examiner asserts on page 4 of the Office Action that Lanier '139 teaches storing the virtual objects in the viewer's terminals at paragraph 30. Applicants respectfully disagree.

As noted above with respect to claims 22 and 25, Lanier does not disclose or suggest receiving one or more virtual objects for use with one or more of the virtual object location and inserting one or more of the received virtual objects into one or more of the virtual object locations during a display or storage of the video program at the viewer's terminal. Furthermore, Lanier does not teach or suggest storing virtual objects in the viewer's terminals.

Lanier '139 does not cure this defect. Paragraph 30 of Lanier '139 recites: "[p]rerecorded or simulated behavior may be superimposed on the model together with the real time behavior. The input data also may come from stored data bases or be algorithmically derived." (See column 8, lines 13-16 of Lanier '139.) The cited language merely teaches that the input data may come from stored data bases, and does not involve storing the virtual objects in the viewer's terminals. Storing data in databases is materially different from storing virtual objects in the viewer's terminals. Databases are merely storages, whereas viewer's terminals may offer multiple functions, such as displaying, processing, and transmitting graphics and textual signals and message. Therefore, storing data in a database certainly does not teach or suggest storing data in a viewer's terminal, let alone storing virtual objects in a viewer's terminal. Since Lanier and Lanier '139, alone or in combination, do not disclose or suggest all of the elements of claim 1, claim 1 is allowable.

Claims 2-6 and 8 are allowable because they depend from allowable claim 1 and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 1-6 and 8 under 35 U.S.C. §103 (a).

With respect to claim 9, for at least the same reason as noted above with respect to claims 22, 25, and 1, Lanier and Lanier '139, alone or in combination, do not disclose or

suggest “a receiver that receives the virtual objects and the video programs; a memory that stores the virtual objects; and a processor that inserts the virtual objects into the virtual object locations during a display of the video programs” as recited in claim 9 (emphasis added). Since Lanier and Lanier ‘139, alone or in combination, do not disclose or suggest all of the elements of claim 9, claim 9 is allowable.

Claims 10-15 and 17 are allowable because they depend from allowable claim 26 and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 9-15 and 17 under 35 U.S.C. §103 (a).

With respect to claim 18, for at least the same reason as noted above with respect to claims 22, 25, and 1, Lanier and Lanier ‘139, alone or in combination, do not disclose or suggest “receiving one or more virtual objects; storing the received virtual objects; receiving a video program including one or more virtual object locations, ... comparing the virtual object information and the received virtual objects to select virtual objects for placement in the virtual object locations; and inserting the selected virtual objects into the virtual object locations” as recited in claim 18. Since Lanier and Lanier ‘139, alone or in combination, do not disclose or suggest all of the elements of claim 18, claim 18 is allowable.

Claims 19-21 are allowable because they depend from allowable claim 18 and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 18-21 under 35 U.S.C. §103 (a).

Claims 23, 24, 26, and 27 are allowable because they depend from allowable claim 22 and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 23, 24, 26, and 27 under 35 U.S.C. §103 (a).

Claims 7 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lanier in view of Lanier ‘139 and further in view of U.S. Patent 5,737,533 to de Hond (hereafter “de Hond”). Applicants respectfully traverse.

Claims 7 and 16 are allowable because they depend from allowable claims 1 and 9, respectfully, and for the additional features they recite. Applicants therefore respectfully request withdrawal of the rejection of claims 7 and 16 under 35 U.S.C. §103 (a).

In view of the above remarks, Applicants respectfully submit that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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